

TYPES OF THE ORDOVICIAN TRILOBITES
CELTENCRINURUS MULTISEGMENTATUS
(PORTLOCK) AND
CRYPTOLITHUS LATUS PORTLOCK

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ABSTRACT. Attention is drawn to a hitherto overlooked note by Portlock, dated 1837, which is of significance to the dates and type specimens of the trilobite species *Celtenocrinurus multisegmentatus* (Portlock) and *Cryptolithus latus* Portlock, both of which have been assumed to have dated from Portlock's 1843 Report.

IN the course of curation and cataloguing the Lower Palaeozoic part of the Portlock Collection held by the Institute of Geological Sciences, London, research led to a notice by Portlock published in November 1837, and thus predating the well-known *Report on the Geology of Londonderry, etc.* published in February 1843. The 1837 notice appears at the back of Larcom's memoir on the *Ordnance Survey of the County of Londonderry*. Portlock (1843, p. v) and Andrews (1975, p. 157) both suggest that this work was previously printed for the British Association meeting in Dublin in 1835, but, by Article 9 (2) of the International Code of Zoological Nomenclature, this does not constitute a publication. No copy of this has been traced and circulation was probably very limited, whereas the 1837 version is stated by Andrews (1975, p. 158) to have sold 1,250 copies in six years. However, it has seldom been referred to by subsequent authors.

The 1837 notice includes three plates of fossils, mostly from the Pomeroy area, Co. Tyrone, and introduces two new specific names, *Calymene multisegmentatus* and *Cryptolithus latus*. Both of these species have in the past been taken as dating from the 1843 report, with types recognized accordingly. In both cases the specimens figured in 1837 differ from those figured, with revised generic assignments, in 1843. The specimens figured in 1837 and recognized in the Portlock Collection at the Institute of Geological Sciences, London, are here chosen as lectotypes, being the only certain surviving syntypes, there being no evidence to indicate whether the specimens figured in 1843 were known to Portlock in 1837.

Notes on the specimens

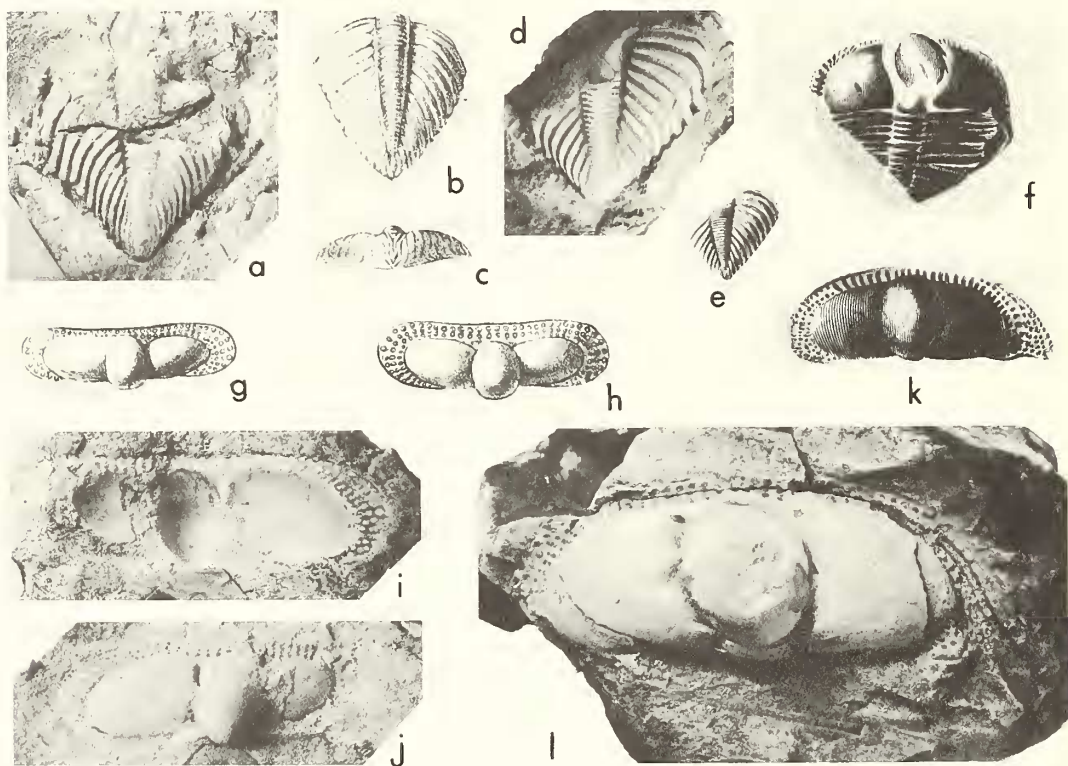
Celtenocrinurus multisegmentatus

- 1837 *Calymene multisegmentatus* Portlock, p. 6, pl. 2, fig. 7.
1843 *Ampyx baccatus* Portlock, p. 262, pl. 3, fig. 11.
1843 *Amphion multisegmentatus* Portlock, p. 291, pl. 3, fig. 6a, b.

- 1853 *Encrinurus multisegmentatus* Portlock; Salter, pl. 4, p. 7 (includes both *multisegmentatus* and *baccatus* in *E. multisegmentatus*).
 1906 *Encrinurus multisegmentatus* (Portlock); Reed, p. 122.
 1957 *Encrinurus multisegmentatus* (Portlock); Tripp, p. 61, pl. 11, fig. 6; pl. 12, figs. 2a, b, 4, 6.
 1977 *Celtencrinurus multisegmentatus* (Portlock); Evitt and Tripp, p. 119.

The Portlock Collection contains one incomplete cranium of *baccatus*, GSM 35415, stated by Portlock (1843, p. 262) to be his only specimen and therefore the holotype by monotypy of that species.

Three Portlock specimens of *multisegmentatus* are known; GSM 35416, 35417, 35419, all pygidia. Specimen 35417 can be identified as that figured in 1837, while 35416 has long been regarded as that figured in 1843. It must be observed, however, that 35417 bears some resemblance to the 1843 figure if allowance is made for the



TEXT-FIG. 1. *a-e*, *Celtencrinurus multisegmentatus* (Portlock). *a*, GSM 35416, pygidium, $\times 2$. *b*, *c*, reproductions of Portlock's figures of the same specimen (1843, pl. 3, fig. 6a, b), $\times 1$. *d*, GSM 35417, lectotype, pygidium, $\times 2$. *e*, reproduction of Portlock's figure of the same specimen (1837, pl. 2, fig. 7), $\times 1$. *f-l*, *Cryptolithus latus* Portlock. *f*, reproduction of Portlock's figure of a specimen not now known (1837, pl. 2, fig. 8), $\times 1$. *g*, *h*, reproductions of Portlock's 1843 pl. 1B, figs. 11, 12 respectively, $\times 1$. *i*, GSM 14016, cephalon, the supposed original of Portlock's 1843 figures, $\times 2$. *j*, latex cast from GSM 14016, $\times 2$. *k*, reproduction of Portlock's 1837 pl. 1, fig. 5, $\times 1$. *l*, GSM 14019, lectotype, cephalon, the original of Portlock's 1837 figure, $\times 2$. All specimens are from the Killey Bridge Formation (Ashgill Series, Cautleyan Stage), Pomeroy district, Co. Tyrone.

reconstruction of the left side, Portlock's figure appearing somewhat diagrammatic on that side. Both have been refigured by Tripp (1957, pl. 12, figs. 4, 6), who mistakenly considered 35416 to be the holotype (by monotypy) in the belief that Portlock's description (1843, p. 291) referred to only one specimen (R. P. Tripp 1976, pers. comm.). Portlock's use of the word *neither* in his discussion (1843, p. 291, line 22) indicates that two specimens were available to him in the preparation of the 1843 Report, but the number of specimens available at the time of his preparation of the 1837 paper is not known. GSM 35417 is, therefore, the only certain syntype and as such is designated as lectotype of *Calymene multisegmentatus* Portlock, 1837. The lithology suggests that the specimen is from the Killey Bridge Formation (Ashgill Series, Cautleyan Stage); Pomeroy district of Co. Tyrone, exact locality uncertain.

Cryptolithus latus

- 1837 *Cryptolithus latus* Portlock, p. 6, pl. 1, fig. 5; pl. 2, fig. 8.
 1843 *Trinucleus fimbriatus* Murchison; Portlock, p. 264.
 1843 *Trinucleus latus* Portlock, p. 264, pl. 1B, figs. 11, 12 (as *T. fimbriatus* Murchison), Synoptical table p. 753.
 1853 *Trinucleus portlockii* Salter, pl. 7, p. 6 (cited only).
 1952 *Trinucleus (Cryptolithus) portlockii* Salter; Reed, p. 99.
 1975 ?*Cryptolithus portlockii* Salter; Hughes, Ingham, and Addison, p. 594.

Portlock's explanations to his 1837 figures read thus: pl. 1, fig. 5 *Head of trilobite see Plate 2 Fig. 8* and pl. 2, fig. 8 *Cryptolithus latus*; clearly he included both in *latus*. Of the two figured specimens, only the former has been recognized; this is GSM 14019, which as the only known syntype from 1837, is designated as lectotype of *C. latus* Portlock, 1837; Killey Bridge Formation (Ashgill Series, Cautleyan Stage); Pomeroy district of Co. Tyrone, exact locality uncertain. GSM 14016 is the specimen figured in 1843, pl. 1B, fig. 11 and probably fig. 12 despite the confusion shown by Reed 1952, pp. 98–100, where he identified Portlock's figures with specimens GSM 14014, 14016, and 14017 on consecutive pages.

Acknowledgements. I thank Mr. R. P. Tripp for encouragement and help in discussion, and the Sydney Jones Library, Liverpool University, for providing photographs of Portlock's original plates. Published by permission of the Director, I. G. S.

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Typescript received 3 December 1976
Revised typescript received 5 April 1977

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